1) - 3) (Cancelled)

4) (Previously Presented) A system for allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources, said system including:

means for first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in the associated resource group; and

means, operable if a call can not be assigned on a best fit basis, for assigning the call to a DSP utilizing a load balancing pool which indicates the number of calls on each DSP.

5) (Previously Presented) A method of allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources, said method including the steps of:

first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in an associated resource group, the codecs in each resource group requiring substantially the same amount of resources; and

if a task can not be assigned on a best fit basis, assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource.

6) (Previously Presented) The method recited in claim 26 wherein said resource groups take into account which codecs have a same first channel penalty.

7) (Previously Presented) A method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, said method including the steps of:

establishing a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular

resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group;

establishing a load balancing pool that has a number of call load groups, the DSPs in each call load group handling a same number of calls;

first determining if a particular call can be assigned to a DSP based on the information in the best fit pool; and

if a call can not be assigned on a best fit basis, assigning said particular call on a load balancing basis using the information in said load balancing pool.

8) (Previously Presented) A system for allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, said system including:

a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resources to handle a call, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group;

a load balancing pool which has a number of call load groups, the DSPs in each call load group handling the same number of calls;

means for determining if a particular call can be assigned to a DSP based on the information in the best fit pool; and

means, operable if a call can not be assigned on a best fit basis, for assigning said particular call on a load balancing basis using the information in said load balancing pool.

9) (Previously Presented) The method recited in claim 24 further comprising, if a call can be assigned on a best fit basis, assigning said calls on a best fit basis using a best fit pool.

10) (Original) The method recited in claim 9 wherein said best fit pool has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group.

11) (Cancelled)

12) (Cancelled)

13) (Previously Presented) The method recited in claim 10 wherein the codecs in each resource group have a same first channel penalty.

14) (Previously Presented) The system recited in claim 25 further comprising means, operable if a call can be assigned on a best fit basis, for assigning said calls on a best fit basis using a best fit pool.

15) (Original) The system recited in claim 14 wherein said best fit pool has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group.

16) (Cancelled)

17) (Cancelled)

18) (Previously Presented) The system recited in claim 15 wherein the codecs in each resource group have a same first channel penalty.

19) (Original) The method recited in claim 7 wherein said best fit pool also indicates for each particular resource group the DSPs that are executing calls that have a first channel penalty corresponding to the first channel penalty of the codecs in the particular resource group.

20) (Original) The system recited in claim 8 wherein said best fit pool also indicates for each particular resource group the DSPs that are executing calls that have a first channel penalty corresponding to the first channel penalty of the codecs in the particular resource group.

21) (Previously Presented) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources, said sequences of instructions including instructions for:

first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in the associated resource group, the codecs in each resource group requiring substantially the same amount of resources; and

if the task can not be assigned on a best fit basis, assigning the task to a resource with a lightest load utilizing a load balancing pool which indicates the number of tasks assigned to each resource, wherein the resource with the lightest load is indicated by a pointer.

22) (Previously Presented) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks as recited in claim 21 wherein said resource groups take into account which codecs have a same first channel penalty.

23) (Previously Presented) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks as recited in claim 21 wherein said resources are codecs utilizing DSP resources.

24) (Previously Presented) A method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of codecs, at least some of which utilize different amounts of DSP resources, said method including the steps of:

first determining if a particular call can be assigned to a DSP on a best fit basis,

if a call can not be assigned on a best fit basis, assigning said particular call on a load balancing basis so as to balance the load on the plurality of DSPs, wherein said calls are assigned on a load balancing basis using a load balancing pool, and wherein said load balancing pool has a number of call load groups, the DSPs in each call load group handling the same number of calls, and

using a pointer to indicate one of the call load groups, wherein the one of the call load groups has DSPs having a lightest load, and wherein the assigning comprises assigning the particular call to the one of the call load groups.

25) (Previously Presented) A system for allocating a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of codecs, at least some of said codecs requiring different amounts of DSP resources, said system including:

means for first determining if a particular call can be assigned to a DSP on a best fit basis, and

means, operable if a call can not be assigned on a best fit basis, for assigning the call on a load balance basis so as to balance the load on the plurality of DSPs, wherein said calls are assigned on a load balancing basis using a load balancing pool, wherein said load balancing pool has a number of call load groups, the DSPs in each call load group handling the same number of calls, and wherein DSPs in the call load having a lightest load, as indicated by a pointer, are assigned the particular call.

26) (Previously Presented) A method allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources, said method including the steps of:

first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in an associated resource group, the codecs in each resource group requiring substantially the same amount of resources; and

if the call can not be assigned on a best fit basis, assigning the call to a DSP with a lightest load utilizing a load balancing pool which indicates the number of calls on each DSP, wherein the DSP with the lightest load is indicated by a pointer.